

REMARKS

I. INTRODUCTION

Applicants have amended claim 9 in order to provide sufficient antecedent basis for the limitation “said apertures.” No other claims have been amended, and no claims have been canceled. Claims 1-16 are presently pending in this application. Reconsideration is hereby respectfully requested.

II. CLAIM OBJECTIONS

Claim 9 has been objected to due to insufficient antecedent basis for the limitation “said apertures” in line 2. Applicants have made the appropriate correction as required. Applicants submit that sufficient antecedent basis now exists for “said apertures” because the claim has been amended to state that the “positive and negative terminal [of claim 8] include a region extending along said horizontal axis having a plurality of apertures therethrough.” Reconsideration and withdrawal of the objection is hereby respectfully requested.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1, 2, 8, and 10-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Velasquez et al. (U.S. 5, 746, 781) in view of Chaloner-Gill (U.S. 5,445,856). Applicants respectfully traverse these rejections.

Claim 1 recites, “A battery unit, comprising: a plurality of bicells wherein each bicell contains anodic exposed grids at a first end of said bicell and cathodic exposed grids at a second end of each bicell, said second end opposing said first end relative to a horizontal axis; a positive terminal wherein said positive terminal is configured to be in connection with said cathodic exposed grids; a negative terminal wherein said negative terminal is configured to be in connection with said anodic exposed grids; and a packaging envelope configured to enclose said bicells, said packaging envelope comprising a single sheet of laminated, aluminized flexible material.” (emphasis added).

As shown in Figure 1 of Velasquez et al., the anodic and the cathodic grids are on opposing sides relative to a vertical axis, rather than on opposing sides relative to a horizontal axis as positively claimed in claim 1. Furthermore, in claim 1, the positive and negative terminal are also on opposing sides of the same horizontal axis (as a result of the terminals being configured to be in connection with said cathodic exposed grids and said anodic exposed grids respectively, as positively recited in claim 1). On the other hand, as shown in

Figure 1, the terminals of Velasquez et al. appear on the same side of the horizontal axis referenced in claim 1.

As described in the Specification, positive and negative terminals in conventional lithium polymer soft pack batteries are arranged adjacent to each other and therefore, exit from the same side of the package, making it difficult to electrically connect the packages in a compact configuration. Specification, p.1, ll. 17-24. As further described, by arranging terminals on opposing sides of the battery unit, the battery unit may be rotated relative to an adjacent unit to allow for compact configuration of battery units. Specification, p. 2, ll. 10-22. Claim 1 recites a positive terminal at a first end of the battery unit and a negative terminal at a second end, located on an opposing side of the battery unit relative to a horizontal axis. Velasquez et al. does not teach or suggest all of the limitations of claim 1 and therefore, claim 1 is not obvious over Velasquez et al. in view of Chaloner-Gill.

Claims 2 and 8 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Velasquez et al. in view of Chaloner-Gill. Claims 2 and 8 depend from claim 1 directly and therefore contain all the limitations thereof. Accordingly, for at least the same reasons given above in connection with claim 1, Applicants respectfully request reconsideration and withdrawal of the rejection.

Claim 10 recites: "A battery module, comprising: a plurality of battery units configured such that said plurality may be stacked; positive terminals each located at a first end of the battery unit, a first number of positive terminals being equal to the number of said plurality of battery units; negative terminals each located at a second end of the battery unit, said second end opposing said first end relative to a horizontal axis, a second number of negative terminals equal to the number of said plurality of battery units; and a packaging envelope for each one of said battery units, said packaging envelope comprising a single sheet of laminated, aluminized flexible material." (emphasis added).

Therefore, amended claim 10 recites that the positive and negative terminals are located at opposing ends of the battery unit relative to a horizontal axis. Applicants submit that Velasquez et al. does not teach or suggest all of the limitations of claim 10. Velasquez et al. does not teach that the positive and negative terminals are at opposing ends of a battery unit relative to a horizontal axis, nor does Velasquez et al. suggest this limitation. Furthermore, Chaloner-Gill does not teach that the positive and negative terminals are at opposing ends of the battery unit relative to a horizontal axis, nor does Chaloner-Gill suggest

this limitation.. For these reasons, amended claim 10 is not made obvious by Velasquez et al in view of Chaloner-Gill. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 11-13 depend from claim 10, either directly or indirectly, and therefore contain all the limitations thereof. Accordingly, for at least the same reasons given above in connection with claim 10, Applicants respectfully request reconsideration and withdrawal of the rejection. Furthermore, claim 11 contains limitations not taught or suggested by Velasquez et al, and therefore Velasquez et al. in view of Chaloner-Gill cannot render claim 11 obvious. Claim 11 recites: “The battery module of claim 10, wherein a first battery unit is configured in an orientation and a second battery unit is configured in an orientation such that said positive terminal of said second battery unit is electrically connected to said negative terminal of said first battery unit, said second battery unit rotated around a horizontal axis 180 degrees such that first and second battery units create a stacked configuration.” (emphasis added). The configuration of the battery unit in Velasquez et al. would not allow the positive terminal of the second battery unit to electrically connect with the negative terminal of the first battery unit if the second battery unit was rotated around a horizontal axis 180 degrees. If such rotation of the second battery unit occurred, then the positive and negative terminals of the second battery unit would be on an opposing side relative to a horizontal axis to the positive and negative terminals of the first battery unit and would not be able to be electrically connected.

Applicants respectfully traverse any rejection of claim 14. Claim 14 recites, “A method of electrically connecting a battery module, comprising: configuring a first battery unit and a second battery unit; locating positive terminals at a first end of said first and second battery units, a first number of positive terminals being equal to the number of said battery units; locating negative terminals at a second end of said first and second battery units, said second end opposing said first end relative to a horizontal axis, a second number of negative terminals equal to the number of said battery units; enclosing said battery units in individual packaging, said packaging comprising a single sheet of laminated, aluminized flexible material; and orienting said first battery unit and said second battery unit such that said positive terminal of said second battery unit is electrically connected to said negative terminal of said first battery unit, said second battery unit rotated around a horizontal axis 180

degrees such that first and second battery units create a stacked configuration.” (emphasis added).

The Office states that Velasquez et al. provides for two bicells connected in a parallel arrangement and also provides for the stacking of bicells. Office Action, p. 5. Claim 14 overcomes an obviousness rejection based on the prior art of Velasquez et al. and Chaloner-Gill because amended claim 14 includes the limitations, as described above, that the positive and negative terminals are located on opposing sides of the battery unit relative to a horizontal axis and secondly that the positive and negative terminals of adjacent battery units may be electrically connected after the second battery unit is rotated around a horizontal axis 180 degrees. Therefore, Applicants submit that neither Velasquez et al. nor Chaloner-Gill teach or suggest all of the limitations of amended claim 14. MPEP § 2143. For this reason, amended claim 14 is not made obvious by Velasquez et al in view of Chaloner-Gill. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 15-16 depend from claim 14, either directly or indirectly, and therefore contain all the limitations thereof. Accordingly, for at least the same reasons given above in connection with claim 14, Applicants respectfully request reconsideration and withdrawal of the rejection.

For all these reasons, claims 1, 2, 8, 10, and 11-16 are not unpatentable over Velasquez et al. in view of Chaloner-Gill and Applicants respectfully request reconsideration and withdrawal of the rejections.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 3-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Velasquez et al. in view of Chaloner-Gill and further in view of Mas et al. (U.S. 6,348,283). Claims 3-4 depend from claim 1 directly and therefore contain all the limitations thereof. Accordingly, for at least the same reasons given above in connection with claim 1, Applicants respectfully request reconsideration and withdrawal of the rejection.

V. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 5-7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Velasquez et al. in view of Chaloner-Gill and further in view of Hanafusa et al. (U.S. 2001/0051298 A1). Claims 5-7 and 9 depend from claim 1, either directly or indirectly, and therefore contain all the limitations thereof. Accordingly, for at least the same reasons given

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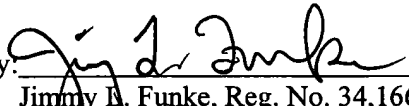
above in connection with claim 1, Applicants respectfully request reconsideration and withdrawal of the rejections.

VI. CONCLUSION

For at least the above-cited reasons, all claims pending in the present application are now believed to be allowable. Early receipt of a Notice of Allowance is hereby respectfully requested.

Respectfully submitted,

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